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| EXAMINER | |
|---|---|
| MILLER, BRANDON J | |
| ART UNIT | PAPER NUMBER |
| 2617 | |

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
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| 3 MONTHS | 04/19/2007 | PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/829,473 | LAPPETELAINEN ET AL. | |
| | Examiner | Art Unit | |
| | Brandon J. Miller | 2617 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *28 December 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-29* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *22 April 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

### *Response to Amendment*

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-21, 23, 25, 27, and 29 are rejected under 35 U.S.C. 102(e) as being anticipated by Carlsson (US 6,868,282 B2).

Regarding claim 1 Carlsson teaches a method comprising connecting a subscriber terminal of a wireless telecommunications system to an infrastructure of the wireless telecommunication system over a wireless interface (see col. 5, lines 65-67 and col. 6, lines 1-7, subscriber terminal sending detach message to network requires that a connection to an infrastructure of the wireless system be made). Carlsson teaches a subscriber terminal holding a subscriber identity in a wireless telecommunications system (see col. 5, lines 65-66, subscriber terminal already registered with the network indicates that its subscriber identity is held in the telecommunication system). Carlsson teaches connecting the subscriber terminal to at least one sub-terminal over a proximity wireless interface, the at least one sub-terminal using the subscriber identity of the subscriber terminal (see col. 5, lines 41-53). Carlsson teaches requesting a radio link from the subscriber terminal, the radio link being directed from the infrastructure to the at least one sub-terminal (see col. 4, lines 18-21 and col. 6, lines 13-15 & 22-

25, requesting the use of remote subscriber identity relates to requesting a radio link from the subscriber terminal, the radio link being directed from the infrastructure to the at least one sub-terminal because the request for remote subscriber identity causes the supplying terminal to de-register from the network, which requires a radio link to be directed between the infrastructure and the supplying terminal). Carlsson teaches generating signaling parameters for controlling a radio link (see col. 5, lines 58-62). Carlsson teaches communicating at least one of the signaling parameters between the sub-terminal and the infrastructure via the subscriber terminal (see col. 5, lines 58-62 and col. 6, lines 13-15 & 22-25, signaling for requesting the use of remote subscriber identity relates to communicating at least one of the signaling parameters between the sub-terminal and the infrastructure via the subscriber terminal because the supplying terminal de-registers from the network by way of the using terminal's request for remote subscriber identity).

Regarding claim 2 Carlsson teaches generating at least some signaling parameters in the sub-terminal (see col. 5, lines 58-62 and col. 6, lines 22-25).

Regarding claim 3 Carlsson teaches communicating at least some signaling parameters between the sub-terminal and the infrastructure over a wireless interface between the infrastructure and the sub-terminal (see col. 5, lines 58-62 and col. 6, lines 22-25).

Regarding claim 4 Carlsson teaches configuring a sub-terminal to provide a radio link according to at least some signaling parameters (see col. 5, lines 58-62 and col. 6, lines 22-25).

Regarding claim 5 Carlsson teaches generating, in the infrastructure, proximity signaling parameters for controlling a proximity wireless interface and communicating the proximity signaling parameters between the subscriber terminal and the infrastructure (see col. 5, lines 58-67 and col. 6, lines 1-7). Carlsson teaches communicating at least some of the proximity

signaling parameters between the subscriber terminal and the sub-terminal; and configuring a proximity wireless interface according to proximity signaling parameters (see col. 5, lines 41-53).

Regarding claim 6 Carlsson teaches terminal system comprising: a subscriber terminal and at least one sub-terminal (see col. 1, lines 44-48). Carlsson teaches connecting a subscriber terminal of a wireless telecommunications system (see col. 5, lines 65-67 and col. 6, lines 1-7, subscriber terminal sending detach message to network requires that a connection to an infrastructure of the wireless system be made). Carlsson teaches a subscriber terminal holding a subscriber identity in a wireless telecommunications system (see col. 5, lines 65-66, subscriber terminal already registered with the network indicates that its subscriber identity is held in the telecommunication system). Carlsson teaches wherein the at least one sub-terminal uses the subscriber identity of the subscriber terminal and is configured to provide a radio link directed from the infrastructure to the at least one sub terminal (see col. 4, lines 18-21 and col. 6, lines 13-15 & 22-25, requesting the use of remote subscriber identity relates to requesting a radio link from the subscriber terminal, the radio link being directed from the infrastructure to the at least one sub-terminal because the request for remote subscriber identity causes the supplying terminal to de-register from the network, which requires a radio link to be directed between the infrastructure and the supplying terminal). Carlsson teaches a radio link controlled on the basis of signaling parameters (see col. 5, lines 58-62). Carlsson teaches communicating at least one of the signaling parameters between the sub-terminal and the infrastructure via the subscriber terminal (see col. 5, lines 58-62 and col. 6, lines 13-15 & 22-25, signaling for requesting the use of remote subscriber identity relates to communicating at least one of the signaling parameters

between the sub-terminal and the infrastructure via the subscriber terminal because the supplying terminal de-registers from the network by way of the using terminal's request for remote subscriber identity). Carlsson teaches communicating at least one of a signaling parameters between the subscriber terminal and the at least one sub-terminal over a proximity wireless interface (see col. 5, lines 41-53).

Regarding claim 7 Carlsson teaches a device as recited in claim 2 and is rejected given the same reasoning as above.

Regarding claim 8 Carlsson teaches a device as recited in claim 3 and is rejected given the same reasoning as above.

Regarding claim 9 Carlsson teaches configuring a receiving unit according to at least some of the signaling parameters (see col. 6, lines 1-12).

Regarding claim 10 Carlsson teaches communicating proximity signaling parameters between the subscriber terminal and the infrastructure, the proximity signaling parameters being generated in the infrastructure; and an interface unit for configuring the proximity signaling unit according to at least some of the proximity signaling parameters (see col. 5, lines 58-67 and col. 6, lines 1-7).

Regarding claim 11 Carlsson teaches a subscriber of a wireless telecommunications system, the subscriber terminal comprising; connecting a subscriber terminal of a wireless telecommunications system to an infrastructure of the wireless telecommunication system (see col. 5, lines 65-67 and col. 6, lines 1-7, subscriber terminal sending detach message to network requires that a connection to an infrastructure of the wireless system be made). Carlsson teaches a subscriber terminal holding a subscriber identity in a wireless telecommunications system (see

col. 5, lines 65-66, subscriber terminal already registered with the network indicates that its subscriber identity is held in the telecommunication system). Carlsson teaches requesting a radio link directed from the infrastructure to the at least one sub-terminal, the at least one sub-terminal using the subscriber identity of the subscriber terminal (see col. 4, lines 18-21 and col. 6, lines 13-15 & 22-25, requesting the use of remote subscriber identity relates to requesting a radio link from the subscriber terminal, the radio link being directed from the infrastructure to the at least one sub-terminal because the request for remote subscriber identity causes the supplying terminal to de-register from the network, which requires a radio link to be directed between the infrastructure and the supplying terminal). Carlsson teaches generating signaling parameters for controlling a radio link (see col. 5, lines 58-62). Carlsson teaches communicating at least one of a signaling parameters with the at least one sub-terminal over a proximity wireless interface (see col. 5, lines 41-53). Carlsson teaches communicating at least one of the signaling parameters between the sub-terminal and the infrastructure via the subscriber terminal (see col. 5, lines 58-62 and col. 6, lines 13-15 & 22-25, signaling for requesting the use of remote subscriber identity relates to communicating at least one of the signaling parameters between the sub-terminal and the infrastructure via the subscriber terminal because the supplying terminal de-registers from the network by way of the using terminal's request for remote subscriber identity).

Regarding claim 12 Carlsson teaches a device as recited in claim 10 and is rejected given the same reasoning as above.

Regarding claim 13 Carlsson teaches a sub-terminal comprising; providing a radio link directed from an infrastructure of the wireless telecommunication system, to a sub terminal of the wireless telecommunication system, the sub-terminal being connected to the infrastructure

(see col. 4, lines 18-21 and col. 6, lines 13-15 & 22-25, the request for remote subscriber identity causes the supplying terminal to de-register from the network, which requires a radio link to be directed between the infrastructure and the supplying terminal). Carlsson teaches a subscriber terminal holding a subscriber identity in a wireless telecommunications system, the sub-terminal using the subscriber identity of the subscriber terminal (see col. 5, lines 58-62 & 65-66, subscriber terminal already registered with the network indicates that its subscriber identity is held in the telecommunication system). Carlsson teaches generating signaling parameters for controlling a radio link (see col. 5, lines 58-62). Carlsson teaches communicating at least one of the signaling parameters between the sub-terminal and the infrastructure via the subscriber terminal (see col. 5, lines 58-62 and col. 6, lines 13-15 & 22-25, signaling for requesting the use of remote subscriber identity relates to communicating at least one of the signaling parameters between the sub-terminal and the infrastructure via the subscriber terminal because the supplying terminal de-registers from the network by way of the using terminal's request for remote subscriber identity). Carlsson teaches communicating at least one of a signaling parameters between the subscriber terminal and the at least one sub-terminal over a proximity wireless interface (see col. 5, lines 41-53).

Regarding claim 14 Carlsson teaches a device as recited in claim 2 and is rejected given the same reasoning as above.

Regarding claim 15 Carlsson teaches a device as recited in claim 3 and is rejected given the same reasoning as above.

Regarding claim 16 Carlsson teaches a device as recited in claim 9 and is rejected given the same reasoning as above.

Regarding claim 17 Carlsson teaches configuring a proximity signaling according to at least some of the proximity signaling parameters received from the subscriber terminal (see col. 6, lines 22-32).

Regarding claim 18 Carlsson teaches a radio resource control system for controlling radio resources in a wireless telecommunications system (see col. 1, lines 44-51). Carlsson teaches controlling access of at least one sub-terminal to an infrastructure of the wireless telecommunications system on the basis of an access request from a subscriber terminal of a wireless telecommunications system (see col. 4, lines 18-21 and col. 6, lines 13-15 & 22-25, requesting the use of remote subscriber identity relates to access request from the subscriber terminal because the request for remote subscriber identity causes the supplying terminal to de-register from the network, which requires a radio access between the infrastructure and the supplying terminal). Carlsson teaches the subscriber terminal being connected to the infrastructure (see col. 5, lines 65-67 and col. 6, lines 1-7, subscriber terminal sending detach message to network requires that a connection to an infrastructure of the wireless system be made). Carlsson teaches a subscriber terminal holding a subscriber identity in a wireless telecommunications system (see col. 5, lines 65-66, subscriber terminal already registered with the network indicates that its subscriber identity is held in the telecommunication system). Carlsson teaches wherein the at least one sub-terminal uses the subscriber identity of the subscriber terminal and is configured to provide a radio link directed from the infrastructure to the at least one sub terminal (see col. 4, lines 18-21 and col. 6, lines 13-15 & 22-25, requesting the use of remote subscriber identity relates to requesting a radio link from the subscriber terminal, the radio link being directed from the infrastructure to the at least one sub-terminal

because the request for remote subscriber identity causes the supplying terminal to de-register from the network, which requires a radio link to be directed between the infrastructure and the supplying terminal). Carlsson teaches a radio link controlled on the basis of signaling parameters (see col. 5, lines 58-62). Carlsson teaches communicating at least one of the signaling parameters between the infrastructure and the subscriber terminal (see col. 5, lines 58-62 and col. 6, lines 13-15 & 22-25, signaling for requesting the use of remote subscriber identity relates to communicating at least one of the signaling parameters between the sub-terminal and the infrastructure via the subscriber terminal because the supplying terminal de-registers from the network by way of the using terminal's request for remote subscriber identity). Carlsson teaches a communicating at least one of a signaling parameters between the subscriber terminal and the at least one sub-terminal over a proximity wireless interface (see col. 5, lines 41-53).

Regarding claim 19 Carlsson teaches controlling a radio link on the basis of signaling parameters generated in the sub-terminal (see col. 6, lines 22-25).

Regarding claim 20 Carlsson teaches a device as recited in claim 3 and is rejected given the same reasoning as above.

Regarding claim 21 Carlsson teaches controlling the proximity wireless interface on the bases of signaling parameters (see col. 5, lines 58-59). Carlsson teaches for communicating proximity signaling parameters with a subscriber terminal (see col. 6, lines 1-7).

Regarding claim 23 Carlsson teaches elements selected from a group comprising: admission control, allocation of radio resources (see col. 5, lines 66-67 and col. 6, lines 1-10).

Regarding claim 25 Carlsson teaches a device as recited in claim 23 and is rejected given the same reasoning as above.

Regarding claim 27 Carlsson teaches a device as recited in claim 23 and is rejected given the same reasoning as above.

Regarding claim 29 Carlsson teaches a device as recited in claim 23 and is rejected given the same reasoning as above.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 22, 24, 26, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carlsson (US 6,868,282 B2) in view of deTorbal (US 2004/0058678 A1).

Regarding claim 22 Carlsson teaches a device as recited in claim 1 except for generating a handover request to the sub-terminal in the subscriber terminal in order to perform simultaneous handovers of the subscriber terminal and the sub-terminal. Carlsson does teach a subscriber terminal using remote subscriber identity information from another terminal to register and connect with a network (see col. 1, lines 40-51). deTorbal teaches generating a handover request in a subscriber terminal and performing simultaneous handovers of multiple subscriber terminals (see paragraph [0020]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device in Carlsson adapt to include generating a handover request to the sub-terminal in the subscriber terminal in order to perform simultaneous handovers of the subscriber terminal and the sub-terminal because the subscriber terminals in Carlsson communicate using a local communication link and it would allow for

improved communication when registered to a network using remote subscriber identity information.

Regarding claim 24 Carlsson teaches a device as recited in claim 22 and is rejected given the same reasoning as above.

Regarding claim 26 Carlsson teaches a device as recited in claim 22 and is rejected given the same reasoning as above.

Regarding claim 28 Carlsson teaches a device as recited in claim 22 and is rejected given the same reasoning as above.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 13 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 13 recites the limitation "the subscriber terminal" in line 7. There is insufficient antecedent basis for this limitation in the claim.

The above art rejection is based on the best possible claim interpretation in view of the rejection under second paragraph of 35 U.S.C. 112.

***Response to Arguments***

Applicant's arguments filed 12/28/2006 have been fully considered but they are not persuasive.

Regarding independent claims 1, 6, 11, 13, and 18 Carlsson teaches a device as claimed.

Carlsson teaches requesting a radio link from the subscriber terminal, the radio link being directed from the infrastructure to the at least one sub-terminal (see col. 4, lines 18-21 and col. 6, lines 13-15 & 22-25, requesting the use of remote subscriber identity relates to requesting a radio link from the subscriber terminal, the radio link being directed from the infrastructure to the at least one sub-terminal because the request for remote subscriber identity causes the supplying terminal to de-register from the network, which requires a radio link to be directed between the infrastructure and the supplying terminal). Carlsson teaches communicating at least one of the signaling parameters between the sub-terminal and the infrastructure via the subscriber terminal (see col. 5, lines 58-62 and col. 6, lines 13-15 & 22-25, signaling for requesting the use of remote subscriber identity relates to communicating at least one of the signaling parameters between the sub-terminal and the infrastructure via the subscriber terminal because the supplying terminal de-registers from the network by way of the using terminal's request for remote subscriber identity).

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandon J. Miller whose telephone number is 571-272-7869. The examiner can normally be reached on Mon.-Fri. 8:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

April 12, 2007

GEORGE ENG
SUPERVISORY PATENT EXAMINER